

## ABSTRACT OF THE DISCLOSURE

A method of multi-protocol call trace on GPRS Gb and Gr interfaces of a GSM network uses distributed processing. Probes are situated at locations where measurements are desired in a monitored mobile network, such as at

5 Gb and Gr interfaces, and are connected in a non-intrusive manner to the mobile network. A remote server is coupled to each probe over a local area network (LAN) to process data as it is acquired by the probe. The probe and remote server are coupled to a central server via a wide area network (WAN), as are client servers. The remote servers manage the probe data (packet

10 data units – PDUs) in real time to create appropriate transactional and raw data indices that are stored locally with the PDUs. Call/procedure trace applications are initiated from the client servers and disseminated by the central server to the remote servers. The remote servers provide results back to the central server which correlates the results and disseminates them

15 back to the remote servers to obtain additional results for correlation. The results from the central server are provided to the client servers which display or visualize the results.